

## Recombinant Human ATP1B1 protein, His-tagged

Cat. No. ATP1B1-2279H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human ATP1B1(63 - 303aa) fused with His tag at N-terminal was expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	63-303 a.a.
<b>Description</b>	<p>ATP1B1 belongs to the family of Na<sup>+</sup>/K<sup>+</sup> and H<sup>+</sup>/K<sup>+</sup> ATPases beta chain proteins, and to the subfamily of Na<sup>+</sup>/K<sup>+</sup> -ATPases. Na<sup>+</sup>/K<sup>+</sup> -ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions across the plasma membrane. These gradients are essential for osmoregulation, for sodium-coupled transport of a variety of organic and inorganic molecules, and for electrical excitability of nerve and muscle. This enzyme is composed of two subunits, a large catalytic subunit (alpha) and a smaller glycoprotein subunit (beta). The beta subunit regulates, through assembly of alpha/beta heterodimers, the number of sodium pumps transported to the plasma membrane. The glycoprotein subunit of Na<sup>+</sup>/K<sup>+</sup> -ATPase is encoded by multiple genes. ATP1B1 is a beta 1 subunit.</p>
<b>Form</b>	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 0.4M urea
<b>Molecular Mass</b>	30.4kDa (264aa)

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**AA Sequence**

MGSSHHHHHH SSSLVPRGSH MGSEFKPTYQ DRVAPPGLTQ IPQIQKTEIS  
 FRPNDPKSYE AYVLNIVRFL EKYKDSAQRD DMIFEDCGDVPSEPKERGDF  
 NHERGERKVC RFKLEWLGNC SGLNDETYGY KEGKPCIIK LNRVLGFKPK  
 PPKNESLETY PVMKYNPVNL PVQCTGKRDEDKDKVGNVEY FGLGNSPGFP  
 LQYYPYYGKL LQPKYLQPLL AVQFTNLTMD TEIRIECKAY GENIGYSEKD  
 RFQGRFDVKI EVKS

**Purity** > 90% by SDS - PAGE

**Storage** Can be stored at +4 centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.

**Concentration** 1.0 mg/ml (determined by Bradford assay)

## GENE INFORMATION

**Gene Name** [ATP1B1 ATPase, Na+/K+ transporting, beta 1 polypeptide \[ Homo sapiens \]](#)

**Official Symbol** [ATP1B1](#)

**Synonyms** ATP1B1; ATPase, Na+/K+ transporting, beta 1 polypeptide; ATP1B; sodium/potassium-transporting ATPase subunit beta-1; adenosinetriphosphatase; Na, K-ATPase beta-1 polypeptide; Beta 1-subunit of Na(+),K(+)-ATPase; sodium/potassium-dependent ATPase beta-1 subunit; sodium/potassium-transporting ATPase beta-1 chain; MGC1798;

**Gene ID** [481](#)

**mRNA Refseq** [NM\\_001677](#)

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<b>Protein Refseq</b>	NP_001668
<b>MIM</b>	182330
<b>UniProt ID</b>	P05026
<b>Chromosome Location</b>	1q22-q25
<b>Pathway</b>	Aldosterone-regulated sodium reabsorption, organism-specific biosystem; Aldosterone-regulated sodium reabsorption, conserved biosystem; Basigin interactions, organism-specific biosystem; Bile secretion, organism-specific biosystem; Bile secretion, conserved biosystem; Calcium Regulation in the Cardiac Cell, organism-specific biosystem; Carbohydrate digestion and absorption, organism-specific biosystem;
<b>Function</b>	protein binding; sodium:potassium-exchanging ATPase activity;

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